

**Amendment and Response**

Applicant: Michael B. Raynham

Serial No.: 09/848,019

Filed: May 3, 2001

Docket No.: 10004324-1

Title: MEMORY CONTROLLER EMULATOR FOR CONTROLLING MEMORY DEVICES IN A MEMORY SYSTEM

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**REMARKS**

The following remarks are made in response to the Non-Final Office Action mailed January 4, 2005. In that Office Action, claims 1-7, 13-22, and 27-30 were rejected under 35 U.S.C. §102(e) as being anticipated by Bauman et al., U.S. Patent No. 6,381,715 ("Bauman"). Claims 9-12 and 24-26 were read over the art of record, but are objected to as being dependent upon a rejected base claim. Claims 8 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bauman.

With this Response, claim 30 has been amended. Claims 1-30 remain pending in the application and are presented for reconsideration and allowance.

**Title of the Invention**

The Examiner indicated that the title of the invention is not descriptive, and that a new title is required that is clearly indicative of the invention to which the claims are directed. Applicant has amended the title herein to read as follows: MEMORY CONTROLLER EMULATOR FOR CONTROLLING MEMORY DEVICES IN A MEMORY SYSTEM. Applicant respectfully requests removal of the Examiner's objection to the title of the invention.

**35 U.S.C. §§102, 103 Rejections**

The Examiner rejected claims 1-7, 13-22, and 27-30 under 35 U.S.C. §102(e) as being anticipated by Bauman et al., U.S. Patent No. 6,381,715 ("Bauman"). The Examiner rejected claims 8 and 23 under 35 U.S.C. §103(a) as being unpatentable over Bauman. Independent claim 1 is directed to a "memory controller emulator for controlling memory devices in a memory system", and recites "a plurality of storage devices coupled to the counter for storing memory address information, memory data to be stored in the memory devices, and memory commands for controlling operation of the memory devices, each of the plurality of storage devices configured to output data stored therein based upon address values received from the counter." The Examiner indicated that this limitation was taught or suggested by "solid state memory modules (e.g., see Figure 1)." (Office Action at para. no. 6, page 3). Memory 18 shown in Figure 1 of Bauman represents multiple memory banks of a multi-processor system.

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(See, e.g., Bauman at col. 4, lines 49-60). Memory 18 is not part of a memory controller emulator, nor is memory 18 part of the test and initialization module 44 of the multi-processor system shown in Figure 1 of Bauman. Rather, memory 18 is the memory that is tested by the test and initialization module 44. There is no teaching or suggestion in Bauman that memory 18 stores memory address information, memory data to be stored in memory devices, and memory commands for controlling operation of memory devices, as recited in independent claim 1.

In view of the above, Bauman does not teach or suggest each and every limitation of independent claim 1. The Applicant respectfully requests removal of the rejection of claim 1 under 35 U.S.C. § 102(e), and requests allowance of this claim. Since dependent claims 2-15 further limit patentably distinct claim 1, claims 2-15 are believed to be allowable over the cited reference, and allowance of claims 2-15 is respectfully requested.

Independent claim 16 is directed to a “method of emulating a memory controller for controlling memory devices in a memory system”, and recites “storing memory address information, memory data to be stored in the memory devices, and memory commands for controlling operation of the memory devices”. The Examiner indicated that this limitation was taught or suggested by Figure 11 of Bauman. (Office Action at para. no. 7, page 4). Figure 11 of Bauman shows an exerciser tester 1000. There is no teaching or suggestion in Bauman that the exerciser tester 1000 stores memory address information and memory commands for controlling operation of memory devices, as recited in independent claim 16.

In view of the above, Bauman does not teach or suggest each and every limitation of independent claim 16. The Applicant respectfully requests removal of the rejection of claim 16 under 35 U.S.C. § 102(e), and requests allowance of this claim. Since dependent claims 17-29 further limit patentably distinct claim 16, claims 17-29 are believed to be allowable over the cited reference, and allowance of claims 17-29 is respectfully requested.

Independent claim 30 is directed to a memory controller emulator, and, as amended herein, recites “at least one storage device for storing memory command information representing memory commands transmitted from a memory controller to a memory module”. The Examiner indicated that this limitation was taught or suggested by Figure 11 of Bauman. (Office Action at para. no. 8, page 6). Figure 11 of Bauman shows an exerciser

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tester 1000. There is no teaching or suggestion in Bauman that the exerciser tester 1000 includes "at least one storage device for storing memory command information representing memory commands transmitted from a memory controller to a memory module", as recited in independent claim 30, as amended.

In view of the above, Bauman does not teach or suggest each and every limitation of independent claim 30. The Applicant respectfully requests removal of the rejection of claim 30 under 35 U.S.C. § 102(e), and requests allowance of this claim.

**CONCLUSION**

In view of the above, Applicant respectfully submits that pending claims 1-30 are in form for allowance and are not taught or suggested by the cited references. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 1-30 is respectfully requested.

No fees are required under 37 C.F.R. 1.16(b)(c). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 08-2025.

The Examiner is invited to contact the Applicant's representative at the below-listed telephone numbers to facilitate prosecution of this application.

Any inquiry regarding this Amendment and Response should be directed to either David M. Mason at Telephone No. (408) 447-4046, Facsimile No. (408) 447-0854 or Jeff A. Holmen at Telephone No. (612) 573-0178, Facsimile No. (612) 573-2005. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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3/28/05

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CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 28<sup>th</sup> day of March, 2005.

By \_\_\_\_\_

Name: Jeff A. Holmen